Environment

TIMES time step control of the output

VERSN version number and title

EAMB external ambient

TAMB ambient inside the structure WIND scaling rule for wind effects

Properties of the main fire (0)

CHEMI miscellaneous parameters for kinetics

LFBO compartment of fire origin

LFBT type of fire (1)

LFPOS position of the fire in the compartment

FAREA area of the base of the fire FHIGH height of the base of the fire

FMASS pyrolysis rate

FPOS exact position of the fire using x, y, z coordinates

FQDOT heat release rate

FTIME points of time on the fire timeline

CO CO/CO_2 mass ratio

CT fraction of fuel which is toxic HCL hcl/pyrolysis mass ratio hcn/pyrolysis mass ratio

HCR hydrogen/carbon mass ratio of the fuel

OD C/CO₂ mass ratio

O2 ratio of oxygen to carbon in the fuel

Other objects which reference the object datafile (objects.df)

OBJECT additional objects to be burned OBJFL alternative object database file

Windows and doors (vertical vents which allow horizontal flow)

HVENT specify vent which connect compartments horizontally

CVENT opening/closing parameter

Holes in a ceiling/floor (horizontal vents allowing vertical flow)

VVENT specify a vent which connects compartments vertically (only opened or closed)

Compartment information

DEPTH depth of compartments

HEIGH interior height of a compartment WIDTH width of the compartments

HI/F absolute height of the floor of a compartment

alternatively

ROOMA specify room cross-sectional area as a function of height

ROOMH specify room heights corresponding to areas specified with ROOMA

Thermophysical boundary properties

CEILI specify name of ceiling descriptor(s)

WALLS specify the name of wall property descriptor(s) FLOOR specify the name of floor property descriptor(s)

THRMF alternative thermal properties file (thermal.df)

Miscellaneous commands

HALL specify corridor flow model

HHEAT heat transfer between connected compartment walls

SHAFT specify single zone model for a compartment

CFCON ceiling floor heat conduction

CJET ceiling jet

DETECT fire detection and suppression

TARG specify a simplified wall surface target

TARGET specify targets for calculation of local surface temperature and flux

DUMPR specify a file name for saving time histories

HVAC specification

INELV specify **interior** node elevations (for ventilation ducts)

MVDCT describe a piece of (circular) duct work

MVFAN give the pressure - flow relationship for a fan

MVOPN Specify an opening between a compartment and ventilation system

For examples of the use of these parameters, please see <u>DataFileFormatExamples</u>